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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,181	09/09/2005	Judith A. Varner	UCSD-08879	5608

  

EXAMINER
NGUYEN, QUANG

  

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/518,181		VARNER ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Quang Nguyen, Ph.D.		1633	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

Claims 1-24 are pending in the present application, and they are subjected to the following restrictions.

#### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-14, drawn to a method for reducing angiogenesis or for increasing apoptosis in a subject by expressing a nucleotide sequence encoding a protein comprising a protein kinase A catalytic subunit.

Group II, claims 15-18, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using at least a polypeptide sequence comprising a sequence of SEQ ID NO:114.

Group III, claims 15-18, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using at least a polypeptide sequence comprising a sequence of SEQ ID NO:115.

Group IV, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using pertussis toxin.

Group V, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using cholera toxin.

Group VI, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using G alpha i minigene.

Group VII, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using dominant negative G alpha i.

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Group VIII, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using dominant negative G alpha 12/13.

Group IX, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using constitutively active G alpha s.

Group X, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using anti-CD47 antibody.

Group XI, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using dominant positive Rho (RhoV14).

Group XII, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using dominant negative Src.

Group XIII, claims 19-22, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using active Csk.

Group XIV, claims 23-24, drawn to a method for reducing angiogenesis or for increasing cell apoptosis in a subject using Src inhibitor.

The currently claimed subject matter (Inventions of Groups I-XIV) lacks unity of invention according to Rule 13.1 PCT for the following reasons.

The methods in Groups I-XIV are directed to different methods using different active agents that do not share any common core structure among themselves to attain the desired effects. For example, a nucleotide sequence encoding a protein comprising a protein kinase A catalytic subunit (Group I), a polypeptide sequence comprising a sequence of SEQ ID NO:114 (Group II), a polypeptide sequence comprising a sequence of SEQ ID NO:115 (Group III), pertussis toxin (Group IV), cholera toxin (Group V), G alpha i minigene (Group VI), dominant negative G alpha i (Group VII), dominant negative G alpha 12/13 (Group VIII), constitutively active G alpha s (Group IX), anti-CD47 antibody (Group X), dominant positive Rho (Group XI), dominant

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negative Src (Group XII), active Csk (Group XIII) and Src inhibitor (Group XIV) are structurally and chemically different one from the others. **Each of the above active agents can be considered to be a "special technical feature" for each of the methods listed in Groups I-XIV.** Accordingly, the currently claimed subject matter (Inventions of Groups I-XIV) lacks unity of invention according to Rule 13.1 PCT.

Because the currently claimed subject matter lacks unity according to Rule 13.1 PCT for the reasons set forth above, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

***Species restriction:***

**Should Applicants elect Group I**, this application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

1. ***A single species of a pathological condition recited in claim 12.***

***Should Applicants elect autoimmune disease, please further elect a single specific species of an autoimmune disease recited in claim 14.***

**2. A single species of a cell recited in claim 11.**

**3. A single species of tissue recited in claim 4.**

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features because each of the aforementioned species is different structurally, biochemically and histopathologically one from the others. Each different structure can be considered to be a "special technical feature"; and therefore the listed species lack the same or corresponding special technical features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang Nguyen, Ph.D., whose telephone number is (571) 272-0776.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Joseph T. Woitach, Ph.D., may be reached at (571) 272-0739.

**To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1633; Central Fax No. (571) 273-8300.**

**Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.**

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QUANG NGUYEN PHD.  
PRIMARY EXAMINER